

REMARKS

The present application has been carefully studied and amended in view of the outstanding Office Action dated September 20, 2002, and reconsideration of that Action is requested in view of the following comments.

At the outset it is noted that claims 1-9 are pending in this application, but the Office Action only deals with claims 1-6. Clarification is requested.

Applicant respectfully submits that claims 4-6 are not anticipated by Tadatake JP 05090624 and that claims 1-6 are not rendered obvious by the combination of Mitlitsky et al US 5,714,404 ("Mitlitsky") and Takenouchi et al US 5,427,961 ("Takenouchi"), for the following reasons.

Claim 4 has been amended to recite that the photovoltaically active layer is annealed. Support for this amendment is found in the present specification at page 20, lines 20-21. Accordingly, since Tadatake does not teach or suggest annealing of the adhesive material for the solar battery, claims 4-6 are novel and not anticipated by this particular reference. With respect to the Tadatake reference an automatic translation from the Japanese Patent Office has been obtained and a copy is enclosed.

With respect to the rejection over the combination of Mitlitsky and Takenouchi, applicant submits the following.

Mitlitsky teaches the following method for forming a semiconductor device:

- 1) filmforming
temperature NOT $\geq 450^{\circ}\text{C}$ for $t \geq 100\mu\text{s}$
- 2) irradiation with Energy Pulse
temperature NOT $\geq 180^{\circ}\text{C}$ for $t \geq 100\mu\text{s}$

Knowing this teaching a person skilled in the art learns from Takenouchi, column 4, lines 44-46 that PET is much more unstable at high temperatures than PES (as disclosed by Mitlitsky). With this combination knowledge he could have come to the more careful conditions of the first process step according to the present invention:

1) coating

temperature $< T_g$ (90-200°C)

and to use PET as support, but he would not have taken PET, because Takenouchi only discloses properties for PET, that are disadvantageous for the process of Mitlitsky.

Even if a person skilled in the art would have taken PET as support as disclosed by Takenouchi, he would not have changed the teaching of Mitlitsky to come to the second important process step claimed for our invention:

2) Annealing

Temperature $\geq 250^\circ\text{C}$ for $t = 10,000 - 1,000,000 \mu\text{s}$

Knowing the temperature instability of PET compared to PES as taught in Takenouchi, a person skilled in the art would have used a lower temperature and/or a shorter time for PET than taught by Mitlitsky and not a much higher temperature and a drastically longer time for the annealing as claimed for our invention.

Therefore, our invention was not obvious at the time the invention was made and the §103 rejections should be withdrawn.

Applicant notes the double patenting rejection and is currently considering whether or not to abandon copending application serial number 09/890,393 or alternatively whether or not to file a terminal disclaimer. Appropriate action will be taken in response to the double patenting rejection by either of these options.

The application is believed to be in condition for allowance and Notice to that effect is respectfully requested.

Respectfully submitted,

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APPENDIX 1
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4. A solar cell comprising at least one substrate layer and at least one photovoltaically active layer on a support, characterised in that the support is a polymeric organic material having a glass transition temperature of from 90°C to 200°C, and wherein the substrate layer is transparent and electrically conductive, and wherein the photovoltaically active layer is annealed.

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